

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents will not correct images,  
please do not report the images to the  
Image Problem Mailbox.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : Thomas R. Varatta  
Serial No. : 10/085,448  
Filed : February 28, 2002  
For : PREMOLDING ELECTRICAL  
RECEPTACLES  
Appeal No. \_\_\_\_\_  
Examiner : Gary F. Paumen  
Art Unit : 2833

APPEAL BRIEF

RECEIVED  
FEB 17 2004  
TECHNOLOGY CENTER 2800

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 5, 2004.

02/11/2004 AWONDAF1 00000105 182376 10085448

02 FC:2402 165.00 DA

John W. Jones

## Table of Contents

	<u>Page</u>
1. Real Party in Interest.....	1
2. Related Appeals and Interferences.....	1
3. Status of Claims .....	1
4. Status of Amendments .....	1
5. Summary of Invention.....	2
6. Issues.....	4
7. Grouping of Claims.....	4
8. Argument .....	4
i. 35 U.S.C. 112, First Paragraph .....	4
a. First Sentence .....	5
b. Second Sentence .....	5
(i) “[E]mbossment”.....	5
(ii) “[G]ap”.....	6
c. Third Sentence .....	7
d. Fourth Sentence .....	7
e. Last Sentence.....	8
ii. 35 U.S.C. 112, Second Paragraph: No Rejection .....	9
iii. 35 U.S.C. 102 .....	9

Table of Contents (cont'd)

	<u>Page</u>
iv. 35 U.S.C. 103.....	21
a. Wu.....	21
b. Brown et al.....	22
Conclusion .....	25
9. Appendix.....	A1

Table of Authorities

	<u>Page</u>
<u>Cases</u>	
<i>Karsten Manufacturing Corp. v. Cleveland Golf Co.</i> , 58 USPQ2d 1286 (Fed. Cir. 2001).....	24
<i>In re Robertson</i> , 49 USPQ2d 1949 (Fed. Cir. 1999) .....	10
<u>Authorities</u>	
<i>The American College Dictionary</i> (Random House 1955).....	19
<i>Webster's New Collegiate Dictionary</i> (2 Ed. 1949) .....	19

This is appellant's brief on appeal from the Examiner's final rejection, on May 8, 2003, of the pending claims of the above application.

We turn now to the matters set forth in 37 CFR §1.192(c) and in M.P.E.P. "1206 Appeal Brief".

**1. Real Party in Interest**

The real party in interest and owner of the above application is ETCO Incorporated, a Rhode Island corporation with its principal place of business at 25 Bellows Street, Warwick, Rhode Island 02888. (Assignment recorded at Reel 012877, Frame 0199.)

**2. Related Appeals and Interferences**

There is no related appeal or interference.

**3. Status of Claims**

Ten claims are involved. They are set forth in the Appendix.

Appealed: 1 through 6 and 9 through 12. Cancelled: 7, 8, and 13.

**4. Status of Amendments**

Subsequent to final rejection, and indeed contemporaneously with this brief, the following amendments were filed. Claims 7, 8, and 13 were cancelled. Claim 9 was rewritten in independent form. Claim 11 dependency was changed from "8" to "9". The Examiner has, of course, had no opportunity as yet to turn to the matter of entry.

RECEIVED  
FEB 17 2004  
TECHNOLOGY CENTER 2800

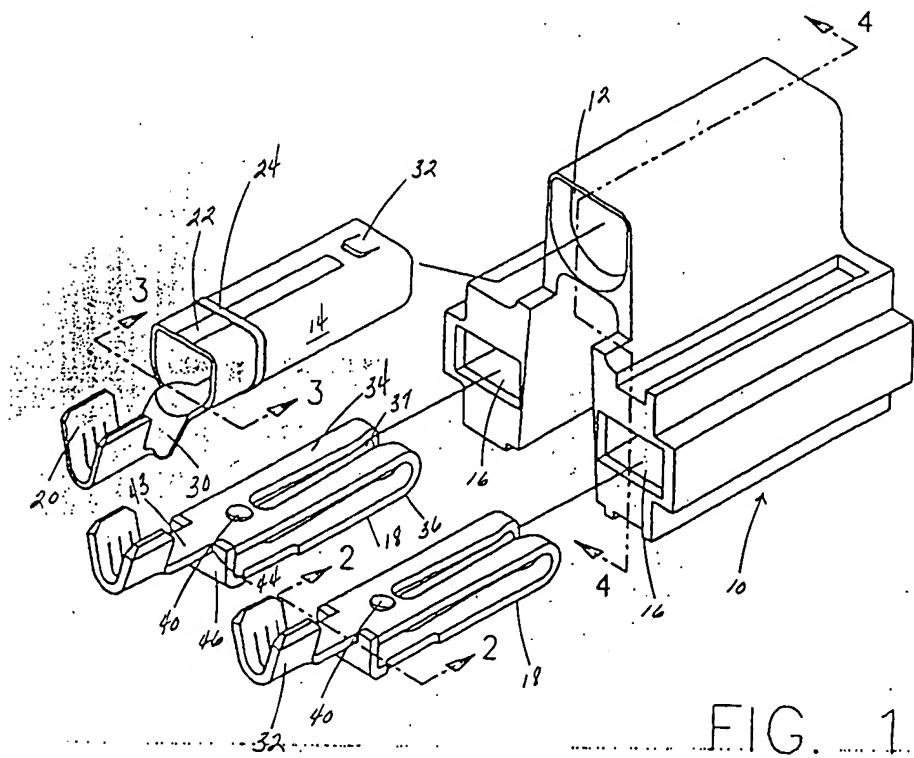
## 5. Summary of Invention

The invention defined in the claims involved in the appeal is of “premolds for use in the manufacture” (Specification, page 1, line 3--“S1:3”)--in “overmolding” (S2:21)--of “receptacles for electrical plugs” (S1:2).

The specification and drawings disclose the unusual situation of one real-life physical embodiment of a preload structure, which in turn embodies two different variants of the broad conceptual invention, of pin gates closable during overmold to desirably prevent unwanted flow therethrough of mold material.

This single-double embodiment is almost completely shown in Fig. 1, “an exploded isometric view” (S1:21). As set forth (S2:2-5):

"Shown in Fig. 1 is a rigid plastic housing 10, molded conventionally of a polycarbonate composition and including an opening 12 for a ground contact pin 14 and two openings 16 for identical contact pins 18."



As to the invention variant embodied in the contact pins of the overall embodiment disclosed (S2:13-15, 19-21):

“Each contact pin 18 includes...a blade portion 34 bent at one end 36 to provide two generally parallel sheets intermediately correspondingly slotted (at 37) to accept one blade of the pair carried by a male electric plug.

“A narrower tongue 43 at the end of one of said sheets engages notch 44 of ‘door’ 46 at the corresponding end of the other of those sheets to prevent flow of plastic in overmolding.

“It has been discovered that incorporating a ‘gate’ in the blades, on one half and working with the other as its seat, a receptacle premold may be provided with great efficiency and greatly diminished labor intensity.”

(S1:10-13).

As for the other embodied variant of the invention (S2:6, 8-10):

“Each ground pin 14 includes...a peripheral circumferential outwardly extending rib 24 and is formed of flat sheet stock formed into abutting unsealed relation at joint 28.”

Figs. 2 and 3 are:

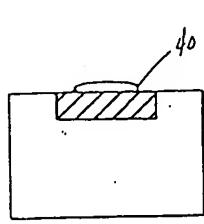


FIG. 2

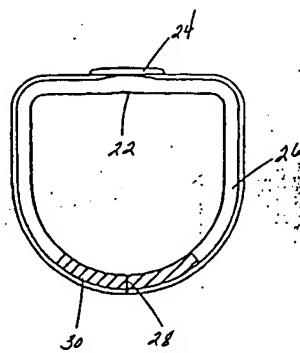


FIG. 3

“In overmolding, conventionally, mold load pins are used conventionally to close housing holes...[1] the load pin closing hole...in the present invention extends also into ground pin 14 to expand its circumference through cooperation with rib 24 and slot 28. The aftermold die surrounds the entire premold assembly shown in Fig. 1.”

(S2:25-3:4.)

## 6. Issues

Claims 1 through 6 and 9 through 12 are pending.

Claims 5, 6, and 9 through 12 are “rejected under 35 U.S.C. 112, first paragraph”, Final Office Action, paragraph 1 (“F.O.A. 1”).

“The drawings are objected to under 37 CFR 1.83(a)”, apparently as allegedly not showing claim features, F.O.A. 2.

Claims 1 through 5 and 9 through 12 stand “rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wu”, F.O.A. 4.

Claim 6 is alternatively rejected on “35 U.S.C. 103(a)...over Wu...and further in view of Brown et al.” F.O.A. 6.

## 7. Grouping of Claims

Although the claims hardly stand together for all purposes, for those of the present rejections and objection, they do.

## 8. Argument

We continue in the same format.

### i. 35 U.S.C. 112, First Paragraph

This asserted “rejection” consists of five sentences.

a. First Sentence

This is:

“Claims 5-13 [are] rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.”

This amounts to no more than a paraphrase of a fraction of the statutory paragraph, along with a conclusory assertion about how it applies here.

b. Second Sentence

On to the second:

“There is no support for the claim recitation of ‘embossment’ and ‘gap’.”

(i) “[E]mbossment”

It is true that claim 5 does include the word “embossment”. It is also true that claim 5 is an original claim, entitled thus on classical patent law principle to status as part of the original specification itself. The specification itself further amplified matters (S2:6, 7-8, 9-10):

“Each ground pin 14 includes...an outwardly directed cylindrical indentation 22 (which facilitates use alternatively with a round ground pin)...and is formed of flat sheet stock....”

Claim 5’s relevant words are (Appendix, page A1, lines 20-21):

“said receptacle including a longitudinal embossment adapted to facilitate use therewith of a round ground pin.”

It is crystal clear that the “indentation 22”, looked at from inside the (Fig. 3, e.g.), is the “embossment 22” viewed in the opposite direction (as in Fig. 1). As the bard said, “A rose by any other name would smell as sweet.”

None of the other claims rejected on paragraph one of 112 even uses the word “embossment”.

(ii) “[G]ap”

Only one of the six pending claims here rejected includes the word “gap” (A2), and it is, again, an original claim:

“6. The premold of claim 1 which also includes a ground pin receptacle, said receptacle including a circumferential rib and a longitudinal gap.”

Even a synonym for “gap” appears in but one other of the claims (A3):

“12. The element of claim 11 in which said body portion is the annulus of a cylinder in cross-section and said valving portion is a peripheral rib extending outwardly thereof, said body portion including a longitudinal split.”

The specification says (S2:6, 8-10, 25; S3:1-3):

“Each ground pin 14 includes...a peripheral circumferential outwardly extending rib 24 and is formed of flat sheet stock formed into abutting unsealed relation at joint 28.

\* \* \*

“In overmolding [the load pin closing the hole to the ground pin] extends also into ground pin 14 to expand its circumference through cooperation with rib 24 and slot 28.”

Again both structure and function are described and explained.

The second sentence is thus not only wholly factually incorrect, but is in any event irrelevant to the purported rejection of most of the claims against which this rejection is fired.

c. Third Sentence

This sentence has become moot owing to cancellation of claim 7.

d. Fourth Sentence

The paragraph went on:

“The structure recited in new claims 8-13 is not disclosed.”

Here once again we are given the conclusory. But, to elaborate once more, recopying the claims in question but inserting parts designations:

We do this in rejected predecessor claims 8 and 9, which have been integrated into pending amended claim 9 (A2):

8. A contact element for restricting flow of overmold into said element which comprises:

a body portion [14, 18] and  
a valving portion [24, 43],  
said valving portion in use restricting said flow.

9. The element of claim 8 which includes also a seating portion [28, 46].

We identify in the same way further features first appearing in other pending claims, claims 10 and 12 (A2):

10. The element of claim 9 in which said body portion [18] is a longitudinally intermediately folded integral unit thin relative to its transverse width and including a blade-receptive slot [37] extending from the fold at said folded location inwardly thereof,

said slot being correspondingly sized and oriented with respect to each body portion from said fold, each said body portion being spaced from the other suitably to jointly provide a female contact for a male plug blade,

and which also includes a valve portion [43] and a seat portion [46], at facing ends of said body portion away from said fold.

12. The element of claim 11 in which said body portion [14] is the annulus of a cylinder in cross-section and said valving portion is a peripheral rib [24] extending outwardly thereof, said body portion including a longitudinal split [28].

e. Last Sentence

The fifth of the sentences purportedly supporting a 112 first paragraph rejection was:

“Thus these limitations will not be considered for patentability.”

This remark is plainly neither supportive of or relevant to the purported rejection.

We shall mention it more hereinafter.

ii. 35 U.S.C. 112, Second Paragraph: No Rejection

Lack of relevant rejection makes this inapplicable.

iii. 35 U.S.C. 102

Extraordinarily, everything said about the merits of this rejection (using “merits” in its classic sense of “as opposed to procedural”) was quoted above under “Issues”. To repeat, fully verbatim and, extraordinarily, in extenso (F.O.A. 4):

“Claims 1-5, 7-13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wu.”

Conclusory? Fiat run riot?

The identical words, with identical lack of discussion of the merits, were used with respect to claims 1 through 5 and 7 in the original Office Action, of January 17, 2003, paragraph 4.

In response then, applicant said (op. cit. 3):

“[I]t is elementary black letter law that [such a rejection] is only proper if the single reference involved (here, Wu) includes each and every feature or element of each claim so rejected.

“Claims 1 through 5 and 7 each requires a contact pin (‘one of said pins’) which has at one end male-blade-spaced portions (to accept one blade of a plug, specification 2:15-16); Wu shows no such end of a pin. Wu’s male pin receiving means, in contrast, is two spaced ‘flat metal pins 111 and 112’ (col. 4, line 60).

“Furthermore, [in a sense even more importantly,] Wu has nothing whatsoever meeting another feature of claim 1, [which goes near the heart of the invention,] ‘at the other end cooperative valving and seating portions’.”

The Examiner's only comeback was to repeat his original conclusory rejection--this despite his assertion (F.O.A. par. 7):

“Applicant’s arguments filed April 21, 2003 have been fully considered but they are not persuasive. Due to the indefiniteness noted above the claims are considered very broad and thus met by the applied references.”

We wish not to unduly belabor the obvious, but at least we might memorialize one recent and straightforward opinion.

It is indeed well settled that, as our mutual tribunal of review put it recently in its *In re Robertson*, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999):

“Anticipation under 35 U.S.C. § 102(e) requires that ‘each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.’ *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).”

To amplify further the overall context, we quote also from the Court (op. cit. 1949-1951):

“This appeal challenges the decision of the Board of Patent Appeals and Interferences (Board) that claim 76 in the appellants’ patent application was anticipated by...United States Patent No. 4,895,569 (the Wilson patent). We reverse.

“I

“Both claim 76 and Wilson involve fastening and disposal systems for diapers. In both, the body of the diaper features a small front and a larger rear section. The outer edges of those sections are attached at the wearer’s waist in the hip area. Once the diaper is soiled and then removed, the smaller front section is rolled up into the larger rear section and secured in this rolled-up configuration by fasteners.

“The appellants’ application is for ‘an improved mechanical fastening system for...disposable absorbent articles [i.e., diapers] that provides convenient disposal of the absorbent article.’ [J.A. 12] Claim 76 covers:

“[A] mechanical fastening system for forming side closures...comprising a closure member...comprising a first mechanical fastening means for forming a closure, said first mechanical fastening means comprising a first fastening element; a landing member...comprising a second mechanical fastening means for forming a closure with said first mechanical fastening means, said second mechanical fastening means comprising a second fastening element mechanically engageable with said first element; and

“disposal means for allowing the absorbent article to be secured in a disposal configuration after use, said disposal means comprising a third mechanical fastening means for securing the absorbent article in the disposal configuration, said third mechanical fastening means comprising a third fastening element mechanically engageable with said first fastening element...”

“[J.A. 73]

“Claim 76 thus provides for two mechanical fastening means to attach the diaper to the wearer and a third such means for securing the diaper for disposal.

“The Wilson patent discloses two snap elements on fastening strips attached to the outer edges of the front and rear hip sections of the garment. The fastening strips may also include ‘secondary load-bearing closure means’--additional fasteners to secure the garment; they may be identical to the snaps.

“Wilson also states:

“[D]isposal of the soiled garment upon removal from the body is easily accomplished by folding the front panel...inwardly and then fastening the rear pair of mating fastener members...to one another, thus neatly bundling the garment into a closed compact package for disposal.”

“[JA 085 at col. 6, 11, 20-25]

“In other words, Wilson does not provide a separate fastening means to be used in disposing of the diaper. Instead, it suggests that disposal of the used diaper may be ‘easily accomplished’ by rolling it up

and employing the same fasteners used to attach the diaper to the wearer to form 'a closed compact package for disposal.'

"In holding that the invention claim 76 covers was anticipated by Wilson, the Board did not hold that Wilson set forth a third fastening means. Instead, it found that Wilson anticipated claim 76 'under principles of inherency.' [J.A. 5] Applying the language of claim 76 to the operation of Wilson, it concluded that 'an artisan would readily understand the disposable absorbent garment of Wilson...as being inherently capable of [making the secondary load-bearing closure means] (third fastening element) mechanically engageable with [the other snap fasteners on the fastening strip] (first fastening element)' [J.A. 5]--i.e., using the secondary closure not with its mate, but with one of the primary snap fasteners. The Board summarily affirmed the examiner's alternative ruling that claim 76 would have been obvious in light of Wilson because 'claim 76 lacks novelty.' [J.A. 7]

\* \* \*

"The Wilson patent does not expressly include a third fastening means for disposal of the diaper, as claim 76 requires. That means is separate from and in addition to the other mechanical fastening means and performs a different function than they do. Indeed, Wilson merely suggests that the diaper may be closed for disposal by using the same fastening means that are used for initially attaching the diaper to the body.

"B. If the prior art reference does not expressly set forth a particular element of the claim, that reference may still anticipate if that element is 'inherent' in its disclosure. To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.' *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). 'Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' *Id.* at 1269, 20 U.S.P.Q.2d at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981).

"In finding anticipation by inherency, the Board ignored the foregoing critical principles. The Board made no attempt to show that the fastening mechanisms of Wilson that were used to attach the diaper to the wearer also 'necessarily' disclosed the third separate fastening mechanism of claim 76 used to close the diaper for disposal, or that an artisan of

ordinary skill would so recognize. It cited no extrinsic evidence so indicating.

"Instead, the Board ruled that one of the fastening means for attaching the diaper to the wearer also could operate as a third fastening means to close the diaper for disposal and that Wilson therefore inherently contained all the elements of claim 76. [J.A. 5] In doing so, the Board failed to recognize that the third mechanical fastening means in claim 76, used to secure the diaper for disposal, was separate from and independent of the two other mechanical means used to attach the diaper to the person. The Board's theory that these two fastening devices in Wilson were capable of being intermingled to perform the same function as the third and first fastening elements in claim 76 is insufficient to show that the latter device was inherent in Wilson. Indeed, the Board's analysis rests upon the very kind of probability or possibility--the odd use of fasteners with other than their mates--that this court has pointed out is insufficient to establish inherency."

Wu's specification is apparently a translation from Japanese, and is not easy to read. Nor are the drawings too easy to follow. We shall try to make it easier if we can.

In describing the first of two embodiments mentioned, Wu begins (lines 19-24):

"Herein, an electrical connector according to the present invention is used with a general three-pin electrical plug 111 as shown in FIG. 1. Two of the three pins of the electrical plug are metal pins 111 of a flat plate shape, and the other one is a ground pin 112 of a pillar shape which is optionally included in an electrical plug."

Fig. 1 is:

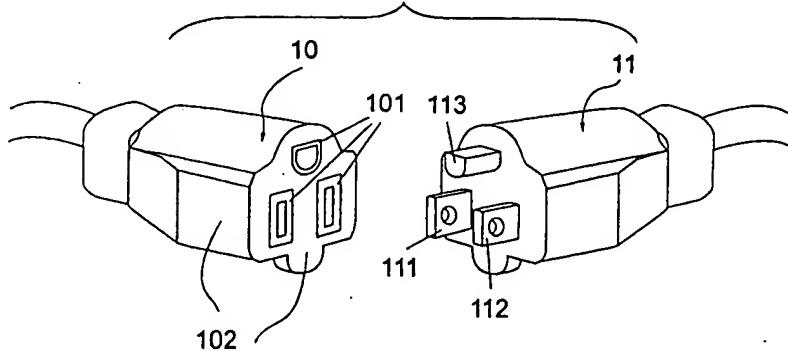


Fig.1(PRIOR ART)

Of this drawing the "Brief Description" says only (col. 3, lines 54-56):

"FIG. 1 is a perspective diagram schematically showing the appearance of a power supply receptacle for inserting therein a power plug;"

Description continues (col. 4, lines 28-30):

"The appearance of an assembled electrical connector according to the present invention is schematically shown in FIG. 4."

(Fig. 4 is, in toto:

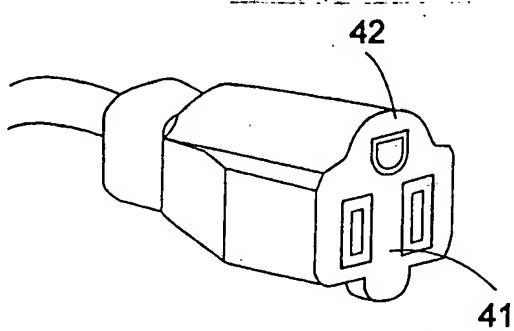


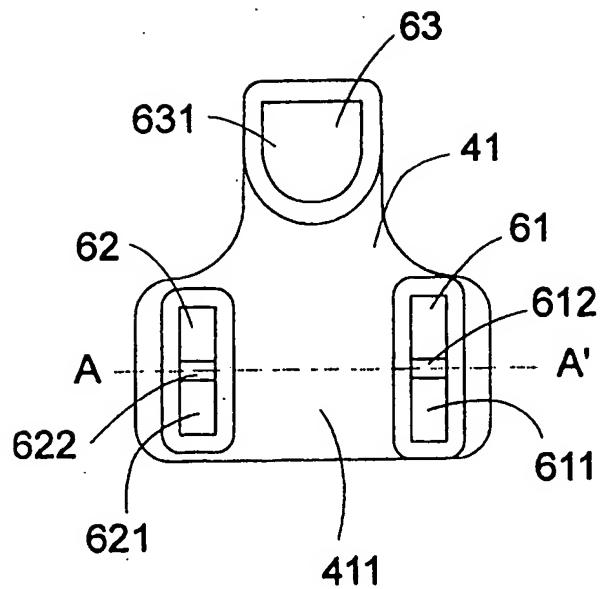
Fig.4

The drawing is identical with the unit 11 of Fig. 1 except that different things are given numbers, and that "Prior Art" is not repeated of it.)

The description goes on (col. 4, lines 30-35):

"The reference numeral 41 indicates a socket portion for receiving metal pins 111, 112 and 113 of an electrical plug 11 (FIG. 1) from a front surface 411 thereof, and the reference numeral 42 indicates a wrapping portion enclosing the socket portion 41 but leaving the front portion 411 exposed."

The surface 411 is shown in Fig. 6A:



**Fig.6A**

Of this figure, the "Brief Description" is (col. 4, line 1):

"FIG. 6A is a front view of the socket portion of FIG. 4,"

Of Fig. 4 it is said (col. 3, lines 64-65):

"FIG. 4 is a schematic diagram of a preferred embodiment of an electrical connector according to the present invention,"

Description continues (col. 4, lines 35-44):

"In addition to the socket portion and the wrapping portion, the electrical connector further includes conductive terminals positioned in the socket portion for respectively clamping the metal pins of the electrical plug to make electric connection therebetween. As for the unseen inner structure of the socket portion 41 and the details of the conductive terminals covered by the socket portion 41 and the wrapping portion 42, they will be described hereinafter with reference to other figures."

Fig. 5 is:

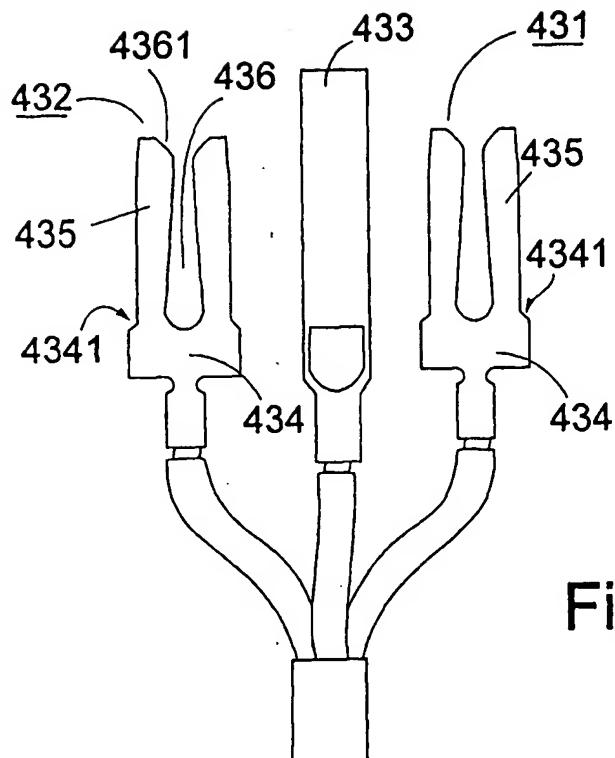


Fig.5

Its "Brief Description" is (col. 3, lines 66-67):

"FIG. 5 is a schematic diagram of a preferred embodiment of conductive terminals according to the present invention;"

Description continues (col. 4, line 44, to col. 5, line 4):

"Please refer to FIG. 5 which is a perspective view of a preferred embodiment of conductive terminals according to the present invention. The conductive terminals 43 are mounted in the socket portion 41, and include two flat metal plates 431, 432 and one metal sleeve 433. Each of the two flat metal plates 431 and 432 has a shape relatively narrow in front and relatively wide in rear, and is consisted of a base 434 and two elastic conductive pieces 435. There is a passage 436 between the two elastic conductive pieces 435. The front end of the passage 436 is designed as a funnel-shaped opening 4361. The metal sleeve 433 has a shape similar to the ground pin 113 of the plug 11, but has a size slightly larger than the ground pin 113. The base 434 includes a shoulder structure 4341 so that the width of the base 434 is larger than the total width of the two elastic conductive pieces 435. When the plug 11 is inserted into the socket portion 41, the flat metal pins 111 and 112 are guided by the funnel-

shaped openings 4361 into the passages 436 to cross the two flat conductive terminals 431 and 432, respectively, and the ground pin 113 enters the sleeve conductive terminal 433. By this way, the metal pins 111, 112 and 113 are in electric contact with the conductive terminals 431, 432 and 433, respectively, in the socket portion 41.

"The inner structure of a preferred embodiment of the socket portion and the assembling manner of the electrical connector will now be described with reference to FIGS. 6A [supra 15] and 6B."

Figure 6B is:

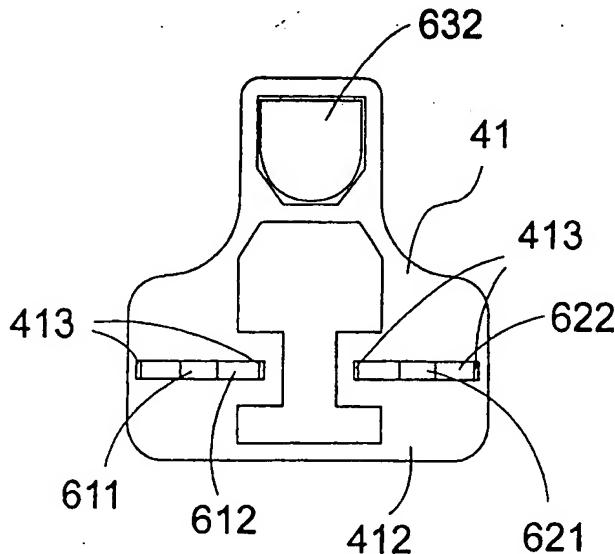


Fig.6B

(The "Brief Description" is--col. 4, line 2--"FIG. 6B is a rear view of the socket portion of FIG. 4".)

The description continues (col. 5, lines 4-33):

"As shown in the figures, the socket portion 41 has three through holes 61, 62 and 63 for respectively receiving the three metal pins 111, 112 and 113 of the plug 11. The three through holes 61, 62 and 63 have respective openings 611, 621 and 631 on the front surface 411 of the socket portion 41 for being inserted therefrom the three metal pins of the plug so that the

openings 611, 621 and 631 are designed to be two slot openings 611 and 621 and one shield-shaped opening 631 for matching the shapes of the metal pins 111, 112 and 113. On the other hand, the three through holes 61, 62 and 63 also have respective openings 612, 622 and 632 on the rear surface 412 of the socket portion 41 for being inserted therefrom the conductive terminals 431, 432 and 433, and the openings 612, 622 and 632 are also designed to be two slot openings 612 and 622 and one shield-shaped opening 632 for matching the shapes of the conductive terminals 431, 432 and 433. The directions of the slot openings respectively on the front and the rear surfaces 411 and 412, however, are perpendicular to each other in order to accomplish the crossing engagement of the flat metal pins and the flat conductive terminals as mentioned above.

“When assembling the electrical connector, the elastic conductive pieces 435 lead the conductive terminals 431 and 432 to enter the through holes 61 and 62 from the openings 612 and 622 on the rear surface 412 of the socket portion 41, and the sleeve conductive terminal 433 is inserted into the through hole 63 from the opening 632. Afterwards, the wrapping portion 42 is injection molded onto the socket portion 41 to secure and protect the inserted conductive terminals 431, 432 and 433 in the socket portion 41.”

Nothing in all this somewhat tortuous description in any way undercuts our arguments presented to the Examiner (supra 9).

Although the Examiner did not say so, it may be that what the Examiner primarily had in mind was the following (col. 5, lines 33-45), to which we hope our attempted explanation will give useful context:

“In order not to give any chance to the material constituting the wrapping portion to enter the through holes during the injection molding process, it is required that the bases 434 of the conductive terminals 431 and 432, each of which has a total width larger than the total width of the two elastic conductive pieces parallelly connected therewith, fill the openings 612 and 622 after the elastic conductive pieces 435 enter the through holes 61 and 62. On the other hand, the shoulder structure 4341 of the base 434 sustains against a stopper structure 413 (FIG. 6C) arranged in each of the through holes 61 and 62 in order to prevent the base 434 from entirely entering the through hole, and thus assure that the base 434 can fill the opening 612 or 622.”

The claims in the application on appeal all require that a pin include within its own self alone both of two separate surfaces movable relative to each other to provide portions with those cooperating surfaces.

It may be of interest to consider two dictionary definitions.

*Webster's New Collegiate Dictionary* (2 Ed. 1949):

“**valve...**, *n.*

\* \* \*

“5. *Mach.* Any device by which the flow of liquid, air or other gas, loose material in bulk, etc., may be started, stopped, or regulated, by a movable part which opens or obstructs passage; also, the movable part of such a device.”

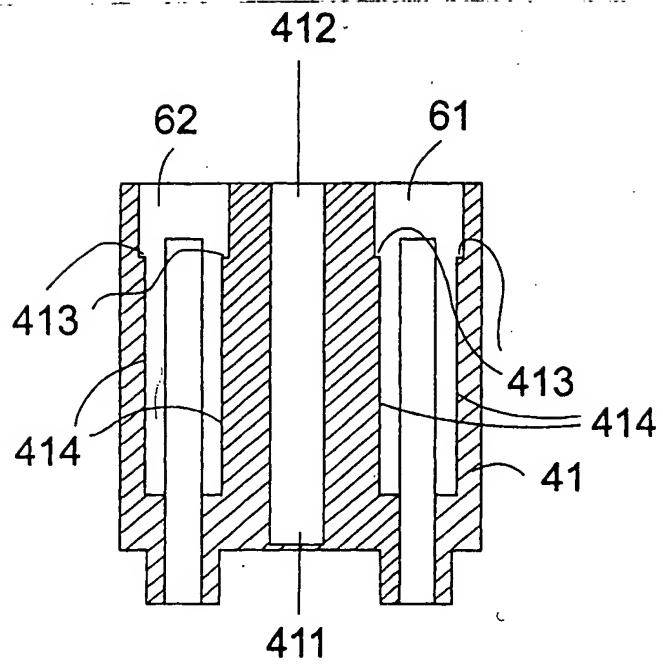
*The American College Dictionary* (Random House 1955):

“**valve...**, *n.*...1. any device for closing or modifying the passage through a pipe, outlet, inlet, or the like, in order to control the flow of liquids, gases, etc. 2. a hinged lid or other movable part in such a device, which closes or modifies the passage.”

Anticipation is avoided not only in most of the claims by Wu's omitting claimed folded and slotted integral contact receptacles but by the important and novel core concept of providing on pins themselves both cooperating gating portions and surfaces.

Wu plainly only gates by valving pin surfaces against the plastic preform itself, as seen in the above description.

In Wu its portion that might be called the seat is “stopper structure 413 (Fig. 6C)” (col. 5, line 42):



**Fig.6C**

The “Brief Description” is, col. 4, lines 3-4:

“FIG. 6C is a cross-sectional taken along a line A-A' of FIG. 6”.

(Wu means Fig. 6A, supra 15; there is no “6”, unless through mental integration of 6A, 6B, and 6C.) The portion 413 is also shown in Fig. 6B (supra 17).

Of the portion engaged by stopper structure 413, Wu says “the shoulder structure 4341 sustains against” it (col. 5, lines 40-41). This numbered portion is shown in Fig. 5, supra 16.

Consideration of all these disclosures in connection with the rejection under 112 is plainly unwarranted.

iv. 35 U.S.C. 103

Claim 6 has been rejected "over Wu...and further in view of Brown et al."

As above set forth, the Examiner unsoundly ignored features of the claim.

a. Wu

In the first place, claim 6 is dependent on claim 1, not rejected under 103 and is thus allowable therewith on classic principles.

Beyond that, Wu is strong evidence in support not only that claim 6 manifests unobviousness, but also that claim 1 manifests itself unobvious.

Wu addressed a problem that was one of those addressed by applicant: how to keep overmold from entering contact pin zones from the wire-crimp ends of the contact pins. (Entrance from the other end of these zones is suitably dealt with by the loading pins mentioned in applicant's specification and implicitly assumed by Wu, conventionally counterbored in the art to accept the contact pin receptacle slots.)

Wu's solution was totally different, and devoid of the concept of putting both a valving portion (in one of that expression's understood senses) and a mating seat both on the same pin.

Applicant provides the additional advantage of a structure which fits with use of his new related approach, using the same inventive conception, to at the same time give added freedom from entry into the wire-crimp end of ground pins, protecting the contact interface.

Wu is actually evidence of the unobviousness of both claim 1 and claim 6. He recognized one of the problems that applicant recognized and solved, but came up with a totally different approach.

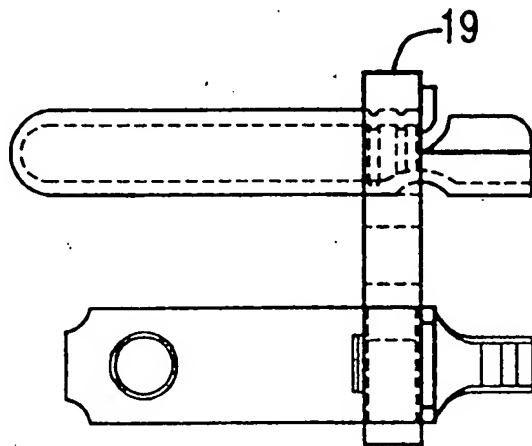
Prior efforts with failure are the strongest kind of lack of obviousness.

b. Brown et al.

Of this ("Brown") the Examiner said (F.O.A. 6):

"Brown et al (Fig. 5) shows the upper ground pin having a circumferential rib, and to provide the ground pin receptacle of Wu with such a rib thus would have been obvious, to better secure the receptacle to the housing."

This figure is:



*FIG. 5*

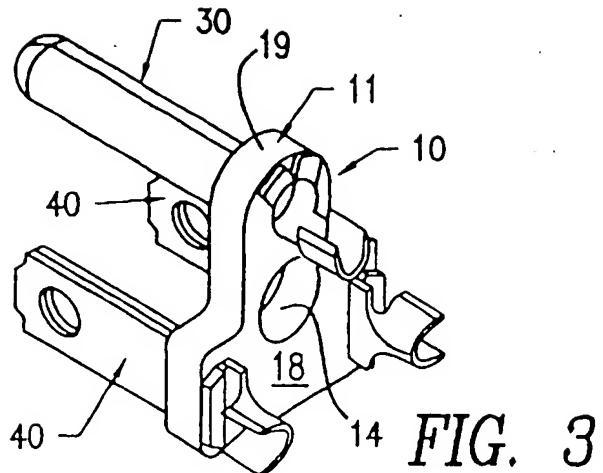
Its "Brief Description", along with that of incorporated Fig. 3, are:

"FIG. 3 is a rear isometric view of the plastic support of the present invention with two blades and a round pin engaged.

\* \* \*

"FIG. 5 is a left side elevation of FIG. 3."

Fig. 3 is:



The only numeral in Figure 5, 19, refers to the thickness of the plastic body carrying the pins (col. 5, line 52). It is unclear whether any protuberance is fully circumferential, or extends beyond the overall surface of the pin. Its purpose is apparently to increase friction with the body during pin insertion, and nothing to do with overmold exclusion, which is apparently dealt with by thus (col. 5, lines 46-48):

"The round pin 30 preferably has an end cap 29, as can be seen in FIG. 6 at the base 37, sealing the inner portion of the shank 32 during molding against plastic inflow."

Fig. 6 and related Fig. 10 are:

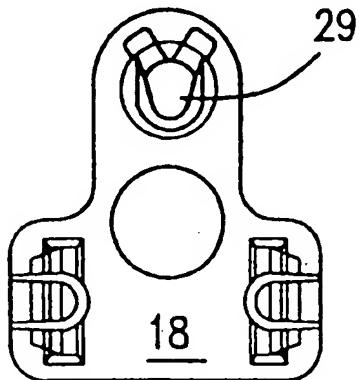
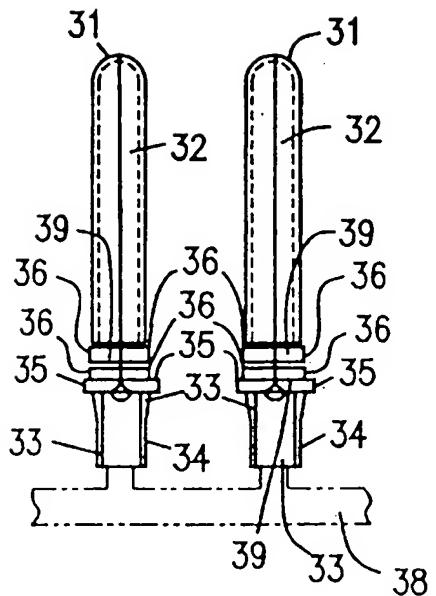


FIG. 6



*FIG. 10*

Far from there being any suggestion in Brown of combination with Wu from an overmold intrusion prevention purpose, he uses his rib, or whatever we should call it, for a totally different purpose, in the very same embodiment achieving overmold exclusion otherwise.

As was ruled in *Karsten Manufacturing Corp. v. Cleveland Golf Co.*, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001):

“In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention. See, e.g., *Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc.*, 21 F.3d 1068, 1072, 30 USPQ2d 1377, 1379 (Fed. Cir. 1994) (When the patent invention is made by combining known components to achieve a new system, the prior art must provide a suggestion, or motivation to make such a combination.’); *Northern Telecom v. Datapoint Corp.*, 908 F.2d 931, 934, 15 USPQ2d 1321, 1323 (Fed. Cir. 1990) (It is insufficient that the prior art disclosed

the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor.'); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ 1434, 1438 (Fed. Cir. 1988) (same)."

### Conclusion

For the foregoing reasons, the rejections of the pending claims should be overruled and withdrawn.

This brief is filed in triplicate as required by 37 C.F.R. 1.192(a).

Please charge the \$165.00 filing fee to the undersigned's Deposit Account No. 18-2376.

Respectfully submitted,

  
\_\_\_\_\_  
Wm. W. Rymer, Reg. No. 17,116  
Attorney

400 South Main Street  
Providence, RI 02903  
(401) 331-0181

## 9. Appendix

The claims involved in the appeal are:

1. A plug receptacle premold which comprises:

a rigid plastic housing,

said housing comprising first and second contact pin holes, and

first and second contact pins,

at least one of said pins having male-blade-spaced portions at one end and

at the other end cooperative valving and seating portions.

2. The premold of claim 1 in which said portions are arranged for resilient biasing toward each other.

3. A plug receptacle premold which comprises:

a rigid plastic housing,

said housing comprising first and second contact pin holes, and

first and second contact pins,

said pins having male-blade-spaced portions at one end and at the other

end cooperative valving and seating portions.

4. The premold of claim 3 in which said valving portion is a tongue and said seating portion is a notch.

5. The premold of claim 1 which also includes a ground pin receptacle, said receptacle including a longitudinal embossment adapted to facilitate use therewith of a round ground pin.

6. The premold of claim 1 which also includes a ground pin receptacle, said receptacle including a circumferential rib and a longitudinal gap.

9. A contact element for restricting flow of overmold into said element which comprises:

a body portion and

a valving portion,

said valving portion in use restricting said flow,

in which said element includes also a seating portion.

10. The element of claim 9 in which said body portion is a longitudinally intermediately folded integral unit thin relative to its transverse width and including a blade-receptive slot extending from the fold at said folded location inwardly thereof,

said slot being correspondingly sized and oriented with respect to each body portion from said fold, each said body portion being spaced from the other suitably to jointly provide a female contact for a male plug blade,

and which also includes a valve portion and a seat portion, at facing ends of said body portion away from said fold.

11. The element of claim 9 in which said valving portion is carried by said body portion.

12. The element of claim 11 in which said body portion is the annulus of a cylinder in cross-section and said valving portion is a peripheral rib extending outwardly thereof, said body portion including a longitudinal split.